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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/681,510	04/18/2001	Shaun D. Pierce	1018.131US1	4612

22801 7590 04/07/2005

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EXAMINER

POLLACK, MELVIN H

ART UNIT	PAPER NUMBER
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2145

DATE MAILED: 04/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/681,510

Applicant(s)

PIERCE, SHAUN D.

Examiner

Melvin H Pollack

Art Unit

2145

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: see attached office action.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-4, 6-8, 12, 13, and 33 are rejected under 35 U.S.C. 102(e) as being anticipated by Morris et al. (6,691,173).

3. For claim 1, Morris teaches a method (abstract; col. 1, line 1 – col. 2, line 55) comprising:

- a. Establishing an instantaneous network (col. 3, lines 25-40) between a first mobile device (Fig. 1, #10, M1) and a second mobile device (Fig. 1, #20, M2), each mobile device having ad hoc networking capability (col. 1, lines 10-60);
- b. Sending first information from the first mobile device to the second mobile device automatically (col. 2, lines 7-11), the first information including at least information received by the first mobile device (col. 2, lines 3-7) from the one or more third devices other than the first mobile device and the second mobile device (Fig. 1, #10, S1, S2, S6 and S7) during at least one instantaneous network previously established between the first mobile device and the one or more third devices (col. 2, lines 19-22); and
- c. Storing the first information at the second mobile device (Fig. 2, #130);

Art Unit: 2145

- d. Wherein the first mobile device is not part of the at least one instantaneous network previously established between the first mobile device and the one or more third devices during the establishing and the sending (col. 5, lines 20-45)
- 4. For claim 2, Morris teaches that the instantaneous network between the first mobile device and the second mobile device is a piconet (col. 3, lines 15-25).
- 5. For claim 3, Morris teaches that the method further comprises:
 - a. Sending (Fig. 3, #184) second information from the second mobile device to the first mobile device (col. 2, lines 15-20), the second information including at least information received by the second mobile device (col. 2, lines 11-15) from one or more fourth devices other than the first mobile device and the second mobile device (Fig. 1, #20, S3 and S5) during at least one instantaneous network previously established between the second mobile device and the one or more fourth devices (col. 3, line 50 – col. 4, line 25); and
 - b. Storing the second information at the first mobile device in a structure (Fig. 2, #130) in which the first information has already been stored (col. 6, lines 45-55).
- 6. For claim 4, Morris teaches that the first information is stored at the second mobile device in a structure in which the second information has already been stored (col. 6, lines 45-55).
- 7. For claim 6, Morris teaches that the first information includes identity information regarding each of the one or more third devices and identity information regarding the first mobile device (Table II).

Art Unit: 2145

8. For claim 7, Morris teaches that the first information includes one or more of: advertising information and dating information (col. 3, lines 55-57, service advertisement).

9. For claim 8, Morris teaches that the first information is divided into nodes (Table I).

10. For claim 12, Morris teaches that the at least one of the one or more third devices and the one or more fourth devices is a mobile device (col. 6, lines 20-25; device = laptop).

11. For claim 13, Morris teaches that the at least one of the one or more third devices and the one or more fourth devices is a stationary device (col. 6, lines 20-25; device = desktop).

12. For claim 33, Morris teaches a method (abstract) for communicating information (col. 1, lines 5-10) from a first device (Fig. 1, #10, M1) to a second device (Fig. 1, #20, M2) via an intermediary mobile device (Fig. 1, S4), each of the first device, the second mobile device and the intermediary mobile device having ad hoc networking capability (col. 1, lines 10-65), the method comprising:

- a. Providing a first ad hoc network including at least the first device and the intermediary mobile device (col. 3, lines 25-40);
- b. Transmitting information from the first device to the intermediary mobile device through the first ad hoc network through which the information is provided from the first device to the intermediary mobile device (col. 2, lines 3-11);
- c. Storing the information in the intermediary mobile device (Fig. 2, #130);
- d. Permitting the first ad hoc network to dissipate at least with respect to the intermediary mobile device (col. 5, lines 20-45);

Art Unit: 2145

- e. Establishing, after the dissipation; a second ad hoc network including at least the intermediary mobile device and the second mobile device (col. 3, lines 25-65; col. 5, lines 45-65); and
- f. Automatically sending the information from the intermediary mobile device to the second mobile device (col. 2, lines 11-20).

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morris as applied to claims 1, 3, 4 above, and further in view of Briancon (6,640,222).

15. For claim 5, Morris does not expressly disclose that each of the structure at the first mobile device and the structure at the second mobile device is a tree structure. Briancon teaches a method (abstract) of data handling and synchronization (col. 1, lines 8-11) in which storage structures are tree structures (col. 4, lines 35-45). At the time the invention was made, one of ordinary skill in the art would have used a tree structure in Morris for better searching and estimating purposes (col. 3, lines 19-25).

16. Claims 9-11, 14, and 16-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morris as applied to claims 1 and 8 above, and further in view of Hild et al. (6,532,368).

Art Unit: 2145

17. For claim 9, Morris does not expressly disclose that each node contains an associated decay value, such that information contained in the node decays over time and the node is deleted upon expiration. Hild teaches a method (abstract) of sharing service advertisements through an ad-hoc wireless network (col. 1, line 1 - col. 6, line 15) in which an associated decay value ("expiry time") follows these limitations (col. 8, lines 33-47). At the time the invention was made, one of ordinary skill in the art would have used an expiry time in Morris data in order to implement more advanced device-tracking techniques desired in Morris (col. 5, lines 20-55) and Hild (col. 4, lines 30-45).

18. For claim 10, Morris teaches that storing the first information at the second mobile device comprises copying each node of the first information into the structure (Table IV), but does not expressly disclose including the associated decay value contained in the node. Hild teaches this limitation (Fig. 2, "expiry time"). At the time the invention was made, one of ordinary skill in the art would have used this storage in Morris in order to determine if the device is present and still providing said service (col. 12, lines 9-45).

19. For claim 11, Morris teaches that storing the first information at the second mobile device comprises copying each node of the first information into the structure (Table III), but does not expressly disclose updating the associated decay value contained in the node. Hild teaches this limitation (col. 8, lines 47-60). At the time the invention was made, one of ordinary skill in the art would have added these features to Morris in order to assist in service updating (col. 8, line 65 - col. 9, line 3) and to fulfill Morris' desire to update advertisements (Morris, col. 5, lines 5-20).

Art Unit: 2145

20. For claim 14, Morris teaches that the first information decays over time, such that the first information is deleted upon expiration. Hild teaches these limitations (col. 8, lines 33-47). At the time the invention was made, one of ordinary skill in the art would have used an expiry time in Morris data in order to implement more advanced device-tracking techniques desired in Morris (col. 5, lines 20-55) and Hild (col. 4, lines 30-45).

21. Claim 16 is drawn to a software system that implements the method drawn in claim 1, but adds exchanging configuration information between the devices, each of the first device and the second device having a current configuration selected from at least a send-only configuration and a send-and-receive configuration, the sending of information based on the configuration of each device. Morris does disclose the exchange of configuration information (col. 4, line 30 – col. 5, line 5), but does not expressly disclose the transfer of data related to send/receive preferences. Morris teaches these limitations (col. 9, lines 4-25). At the time the invention was made, one of ordinary skill in the art would have used this feature in Morris in order to conserve power (col. 9, line 7). It is well known in the art that a system implementation is functionally equivalent to the underlying method. Therefore, since claim 1 is rejected, and given the teachings above, claim 16 is also rejected for the reasons above. A teaching that shows the functional equivalence will be included upon request. In this case, the first and second mobile devices of claim 1 may or may not be mobile, and are thus referred to as first and second devices.

22. Claims 17-23 are drawn to a software system that implements the method drawn in claims 2-4 and 8-11, respectively. It is well known in the art that a system implementation is functionally equivalent to the underlying method. Therefore, since claims 2-4 and 8-11 are

Art Unit: 2145

rejected, claims 17-23 are also rejected for the reasons above. A teaching that shows the functional equivalence will be included upon request.

23. For claim 24, Morris teaches that the at least one of the first device and the second device is a mobile device (col. 6, lines 20-25; device = laptop).

24. For claim 25, Morris teaches that the at least one of the first device and the second device is a stationary device (col. 6, lines 20-25; device = desktop).

25. For claim 26, Morris teaches that the first device has Bluetooth communication capability that enables the ad hoc networking capability (col. 3, lines 13-25).

26. For claim 27, Morris does not expressly disclose that the first device has 802.11b communication (Wi-fi) capability that enables the ad hoc networking capability. Morris does teach that other wireless protocols may be used (col. 3, lines 20-25) and that a first piconet may have a different protocol from a second piconet (col. 3, lines 35-40). Hild teaches this limitation (col. 4, lines 5-45; col. 9, lines 35-67). At the time the invention was made, one of ordinary skill in the art would have used wireless LAN to connect with existing ad-hoc wireless networks and to allow power conservation (col. 9, lines 38-40).

27. Claims 28 and 29 are drawn to a hardware system that effectively describes the limitations of the software system drawn in claims 16 and 17, respectively. It is well known in the art that hardware and software embodiments of the same method and functional limitations are equivalent. Therefore, since claims 16 and 17 are rejected, claims 28 and 29 are also rejected for the reasons above. A teaching regarding the hardware/software equivalence is available upon request.

Art Unit: 2145

28. For claim 30, Morris teaches that the device is a mobile device selected from a group of mobile devices comprising: a wireless phone and a personal-digital assistant (PDA) device (col. 6, lines 20-25; device = hand-held electronic organizer).

29. Claim 31 is drawn to a hardware system that implements the method drawn in claims 8 and 9. It is well known in the art that a system implementation is functionally equivalent to the underlying method. Therefore, since claims 8 and 9 are rejected, claim 31 is also rejected for the reasons above. A teaching that shows the functional equivalence will be included upon request.

30. For claim 32, Morris teaches that the device comprises one or more of: an input component and a display component (col. 6, lines 20-25; devices listed inherently have input and display components by definition).

31. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morris as applied to claim 1 above, and further in view of Davies et al. (6,664,891).

32. For claim 15, Morris does not expressly disclose how the first information is formatted. Davies teaches a method (abstract) of information delivery within wireless networks (col. 1, line 1 – col. 4, line 30) in which the first information is formatted according to a markup language (col. 8, lines 14-16). At the time the invention was made, one of ordinary skill in the art would have used the markup language in Morris to determine implementation features of the message system and to provide a system that would make it easier for users to develop service advertisements (col. 8, lines 8-20).

Response to Arguments

33. Applicant's arguments filed 1/25/05 have been fully considered but they are not persuasive. The reasons for the maintenance of rejection are provided below.

34. In the response to the last office action, the applicant changed the scope of the claims by adding new limitations regarding movement of third devices outside the network to all independent claims. As a result, a final amendment is necessitated even if the examiner provides a new art rejection. The examiner acknowledges that no new matter has been added by this amendment.

35. The examiner withdraws the objections to the drawings, the objection to the oath, and the 112 rejections, due to newly submitted components and claims, and to the remarks made by the applicant.

36. The examiner accepts the applicant's definition of node within the tree structure art definitions.

37. Applicant claims that Morris does not expressly disclose newly added citation in which the first mobile device may transmit to the second mobile device even after the third device moves away. (That is, the first device performs some buffering so that the third device can move away.) Morris teaches messaging i.e. from third device S7 to fourth device S3 through first and second devices M1 and M2 and, in this case, through a device S4 which acts as a temporary bridge (col. 4, lines 20-25), in which some or all of the devices are mobile to one another (col. 3, lines 30-32). If the mobile device S7 starts moving away from M1, it sends a message to other nodes, at which point M1 will transmit S7's message to M2 after S7 moves out of range (col. 5, line 20 – col. 6, line 10). Thus, this limitation is fulfilled.

Art Unit: 2145

38. As for S4's movement, it is true that such movement would keep M1 from communicating with M2. However, S4 would send a message to M1, and M1 would then send that message to S7 after S4's movement. Further, any of the S nodes may be made into an M node (col. 4, line 50 – col. 5, line 20) and vice versa, which means that connections may be formed after S4 leaves one or both networks, maintaining the transmission process.

39. Therefore, for the reasons above, the claim remains anticipated. The rejection is maintained and made final.

Conclusion

40. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melvin H Pollack whose telephone number is (571) 272-3887. The examiner can normally be reached on 8:00-4:30 M-F.


Art Unit: 2145

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Valencia Martin-Wallace can be reached on (571) 272-6159. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MHP

01 April 2005


PATRICE WINDER
PRIMARY EXAMINER